

## Improvements in Biological Observations

physics to phytoplankton (surface chlorophyll):	pretty good
LTL complexity and biophysical coupling :	not yet
LTL models - species groups/types	good progress
- species:	not yet
LTL - fish linkages:	not yet
basic biology	
scientific approach	
time and space scales	
fish - mammal, bird, human linkages	??

Correlations vs mechanisms

Indicators vs models

Linkages between empiricists, modelers and monitoring

Simultaneously, not sequentially